Ordering number: EN 3049B

NMOS + CCD

No.3049B

SANYO

LC8992

PAL CCD 1H Delay Line

Overview

The LC 8992 is a 1H delay line for PAL television systems. It incorporates a 565.5 stage CCD shift register, timing generator, clock driver, sync clamp and auto-bias circuits, and a sample-and-hold amplifier. Only an external low-pass filter is required to implement a 1H delay line. The LC8992 operates with a single 9V power supply and is available in 8-pin plastic DIPs.

Features

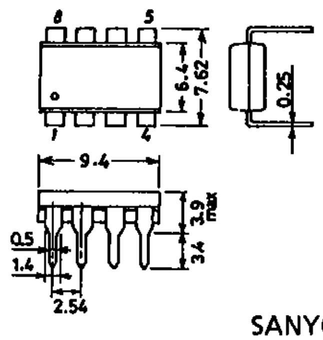
- 1H delay with low-pass filter and 8.86MHz clock.
- Minimum of external components.
- Low clock input voltage.
- Single 9V power supply.
- 8-pin DIP

Package Dimensions

unit : mm

3001B-DIP8

[LC8992]



SANYO : DIP8

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V_{DD} max		11	V
Allowable power dissipation	Pdmax		500	mW
Operating temperature	Topr		–10 to +60	°C
Storage temperature	Tstg		–55 to +150	°C

Electrical Characteristics

DC Characteristics at Ta = 25°C, V_{DD} = 9V, clock = 8.8672375MHz : 0.3Vp-p

Parameter	Symbol	Conditions	min	typ	max	Unit
Supply voltage	V_{DD}		8.5	9.0	9.5	V
Supply current	I_{DD}			20.0	25.0	mA
DC output voltage	V_{GG}			13.5		V
	OUT			3.1		V
	VOB			4.5		V
	V_{ID}IN			2.8		V
	CLK			2.0		V
	C_{OMP}			2.7		V

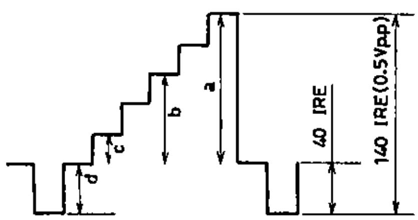
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SANYO Electric Co., Ltd. Semiconductor Business Headquarters
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

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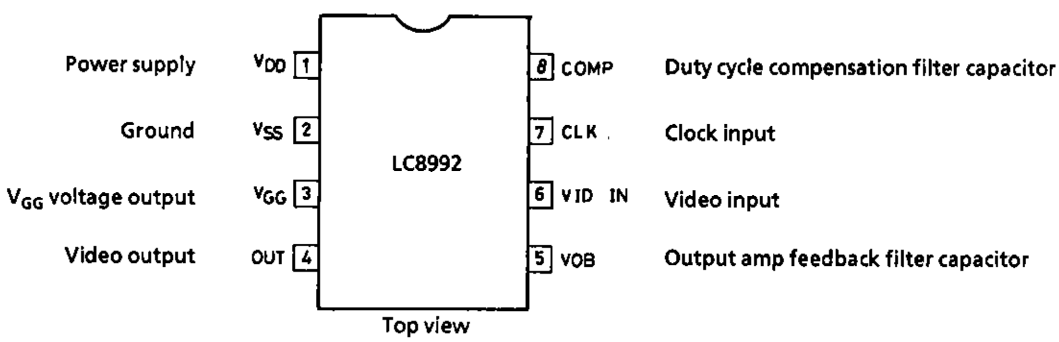
AC Characteristics at Ta = 25°C, V_{DD} = 9V, clock = 8.8672375MHz : 0.3Vp-p

Parameter	Symbol	Conditions	min	typ	max	Unit
Video input voltage	V_{IN} max			0.5	0.7	Vp-p
Voltage gain	G_V	Input : 15kHz, 0.5Vp-p	6	9	11	dB
Linearity	L6	b/a, See note	56	60	64	%
	L2	c/a, See note	18	20	22	%
	LS	d/a, See note	37	40	43	%
Frequency respons	Gf	0.5Vp-p sine wave input, response at 2.4MHz relative to 20kHz	−3.0	−2.0		dB
Noise voltage	V_{NO}	3.8MHz bandwidth		1.1		mVrms
Clock input voltage	E_{CK}		0.1	0.3	1.0	Vp-p
Output impedance	Z_O			520		Ω
Delay time	t_o			63.90		μs

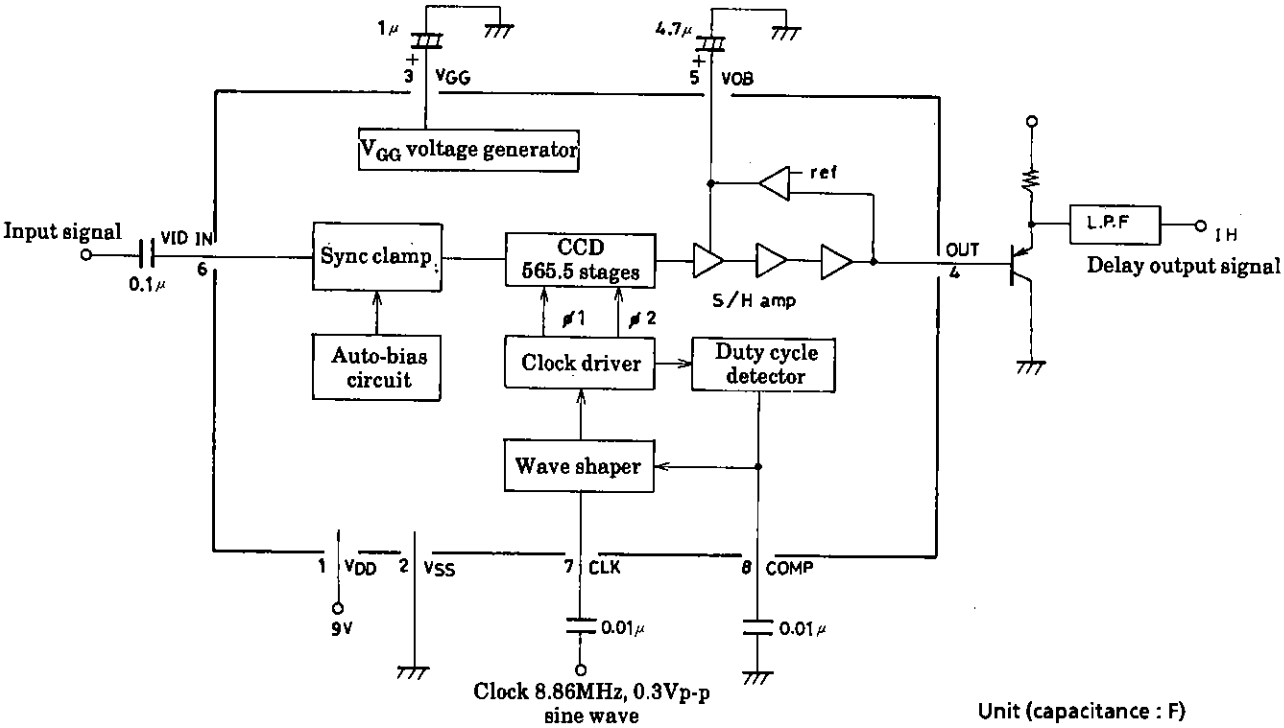


Note) : Linearity test waveform (2.4MHz) / (20kHz)

Pin Assignment

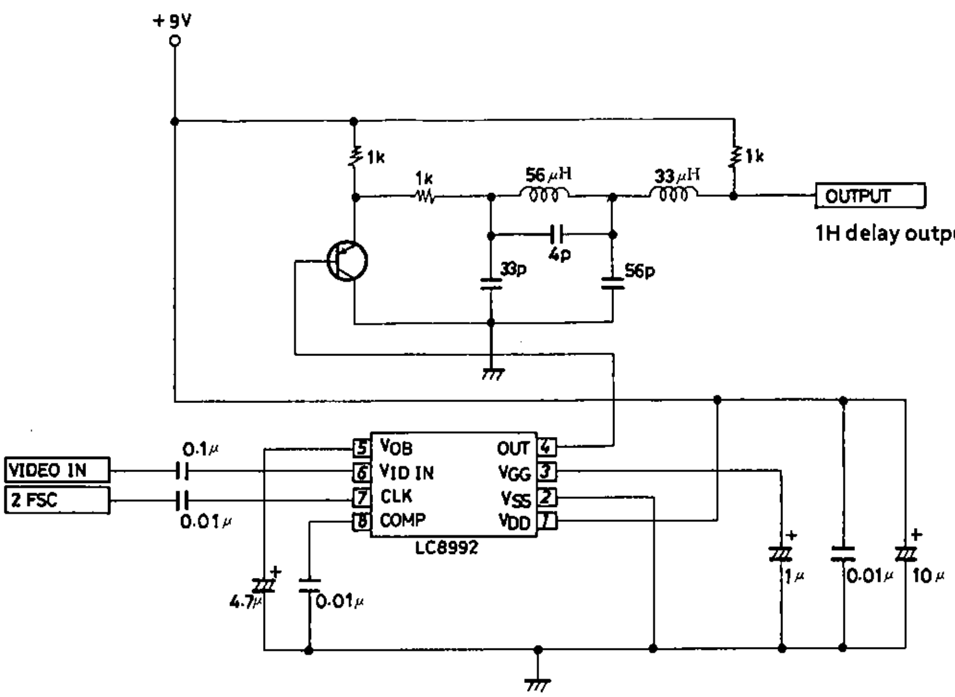


Block Diagram



Unit (capacitance : F)

Sample Application Circuit



Unit (resistance : Ω, capacitance : F)

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